Written evidence submitted by Professor James Kraska and Professor Sean Fahey

1. EXECUTIVE SUMMARY.
2. This evidence focuses on the security interests of the United States in the Arctic region and highlights areas of shared interest and cooperation with the United Kingdom, specifically preserving freedom of navigation in the Arctic and sharing information to improve regional domain awareness.
3. This evidence also discusses the potential security threat posed by the Russian Federation, particularly along the Northern Sea Route, and the role of NATO in the Arctic, with respect to both policy and the development of Alliance capabilities in the region.
4. BRIEF INTRODUCTION.
5. Professor James Kraska is the Howard S. Levie Professor in the Stockton Center for the Study of International Law at the U.S. Naval War College in Newport, Rhode Island. He is also a Distinguished Fellow at the Law of Sea Institute, University of California Berkeley School of Law and Senior Fellow at the Center for Oceans Law and Policy at the University of Virginia School of Law. His publications include numerous scholarly articles and books, including Maritime Power and the Law of the Sea and co-author of the treatise, International Maritime Security Law. Professor Kraska served in the U.S. Navy Judge Advocate General Corps.
6. Professor Sean Fahey is the Associate Director for the Law of Maritime Operations at the Stockton Center for the Study of International Law at the U.S. Naval War College. His research focus is on maritime security issues in the Arctic. He is also the Editor-in-Chief of International Law Studies, and is a Commander in the United States Coast Guard.
7. This evidence is respectfully submitted by the invitation of Dr. Duncan Depledge, Special Adviser to the House of Commons Defence sub-Committee on “Defence in the Artic.” As close military allies, the United States and the United Kingdom have many shared interests in the Arctic region. The evidence submitted here highlights several of those shared interests and encourages continued partnership and collaboration.
8. This evidence is respectfully submitted by Professor Kraska and Professor Fahey in their personal capacities, and does not necessarily represent the views of the U.S. government, the U.S. Department of the Navy, the U.S. Department of Homeland Security, the U.S. Coast or the U.S. Naval War College.
9. U.S. SECURITY INTERESTS IN THE ARCTIC.
10. The United States has four lines of effort to advance its National Strategy for the Arctic Region: (1) preserve freedom of the navigation throughout the Arctic Ocean; (2) enhance Arctic region domain awareness and presence; (3) develop future U.S. energy security; and (4) evolve Arctic strategic capabilities, Navy, Air Force, and Coast Guard force structure and civil infrastructure.
12. Preserving freedom of navigation in the Arctic region is the most critical U.S. regional security interest. Each of the other U.S. security interests in the Arctic Ocean are dependent on freedom of access in the region. Freedom of access in the Arctic affects the ability of the United States to support peacetime and wartime contingencies worldwide.

13. The Arctic region is primarily a maritime domain, with the Arctic Ocean the central physical feature. The armed forces are required to operate on, over and under the oceans. Strategic mobility and maneuverability throughout the Arctic Ocean region – the fourth largest of the world’s oceans – could become critical to support air and sea strategic sealift for contingency operations in virtually every corner of the globe, from the Korean peninsula to the Middle East and South Asia.

14. The Northwest Passage, the shipping route along the Canadian Arctic coastline, and the Northern Sea Route, the shipping route along the Russian Arctic coastline, are potential waterways for transcontinental military sealift to support such contingency operations. Freedom of the seas, to include the rights of freedom of navigation and overflight through the Northwest Passage and the Northern Sea Route, is a top U.S. national security priority. The Northwest Passage and the Northern Sea Route are straits used for international navigation; the regime of transit passage applies to passage through those straits, as in any other strait.

15. The U.S. opposes Canada’s legal characterization of the Northwest Passage as “internal waters,” subject to exclusive Canadian sovereignty. Those areas of the Northwest Passage that are within 12 nautical miles from shore have a dual status in international law, as both territorial seas in which Canada may exercise sovereignty, subject to the right of innocent passage, and a “strait used for international navigation,” when the waters connect one area of the high seas or exclusive economic zone (EEZ) to another area of the high seas or EEZ. In such areas, the international community enjoys the right of unimpeded transit passage by ships, submarines and aircraft. The European Commission has also taken the position that the Northwest Passage is a strait used for international navigation.

16. Similarly, the United States opposes the Russian Federation’s unlawful maritime claims along the Northern Sea Route. The U.S. position is that the Northern Sea Route includes straits used for international navigation, and the regime of transit passage applies to passage through those straits.

17. U.S. policy is to work toward preserving the rights and duties relating to navigation and overflight in the Arctic region and promote the global mobility of military and civilian vessels and aircraft. A central tenant of this policy is to avoid acquiescing to the excessive maritime claims of Arctic coastal nations, such as those of Canada and the Russian Federation. The Arctic Ocean is particularly vulnerable to assertions of unlawful maritime claims given that there is a collective action problem; few nations have the resources or ability to actually contest an excessive claim in the area in a tangible way.
18. The United States asserts its navigational rights diplomatically, by formally lodging protests with states that purport to prescribe unlawful maritime claims, through engagement with the armed forces of other Arctic states, and through the exercise of navigational rights by U.S. warships and aircraft in areas subject to unlawful maritime claims. The United Kingdom, also a major maritime power with similar strategic interests in global maritime mobility, is encouraged to continue its respective practices protesting excessive maritime claims in the Arctic.

19. **Enhancing Arctic Domain Awareness and Presence.**

20. Maritime presence and the ability to conduct maritime security operations in the Arctic Ocean are essential for protecting North America from conventional and unconventional threats. The ability of the United States to effectively exert control over U.S. territory and areas of U.S. sovereign rights and jurisdiction in the Arctic is dependent on the presence of U.S. military and law enforcement assets. Safeguarding the ability of the United States to maintain an effective presence under the water, on the surface of the water and in the air in the Arctic is a top national priority.

21. Maritime presence allows for a full range of maritime security (constabulary) operations, to include counter-terrorism and counter-proliferation, maritime interception operations and visit, board, search and seizure (VBSS) to be applied against irregular maritime threats. Maritime presence also promotes conventional deterrence. Developing capabilities for conducting these missions in the Arctic climate is essential.

22. As an adjunct to maintaining an effective presence, the United States seeks to exercise greater maritime domain awareness. Increased activity in the region will require increased presence and integration of information systems to collect, fuse, and disseminate actionable information. Since the Arctic region is primarily a maritime domain, promoting Naval and Coast Guard operability is a touchstone of the U.S. Arctic policy.

23. Comprehensive maritime domain awareness, however, cannot be attained in isolation. Information sharing among partners is essential to effectively identify and intercept threats long before they pose a risk to allied or national interests. The U.S. leverages several international information-sharing arrangements, such as through the North American Ice Service, to identify and respond to environmental and navigational safety threats. The United Kingdom is encouraged to continue its information-sharing practices in the Arctic.


25. The Arctic has enormous importance for long-term U.S. energy security. The U.S. Geological Survey (USGS) estimates that 13 percent of the world’s undiscovered oil reserves (90 billion barrels) and 30 percent of the undiscovered gas reserves (1,700 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids) are in the Arctic. These estimates are in addition to more than 240 barrels of petroleum reserves that have already been discovered. Eighty-four percent of these reserves estimated by the
USGS are predicted to lie offshore. The USGS estimates that one-third of the oil is in the circum-Arctic region of Alaska and the Alaska Outer Continental Shelf (OCS). Responsibly and safely developing new domestic energy sources strengthens U.S. energy security by reducing U.S. reliance on imported oil, some of which travels vast distances from extremely unstable regions before entering the national supply.

26. **Evolve Arctic Strategic Capabilities and Infrastructure.**

27. Though the harsh environment of the Arctic Ocean makes conventional military threats less likely, irregular threats pose a risk to U.S. security in the region. Areas of concern for U.S. security in the Arctic include: acts of terrorism against critical infrastructure, illegal, unregulated and unreported (IUU) fishing vessel incursions into waters under U.S. jurisdiction, ship borne pollution causing damage to the environment, and criminal activity, which could include drug trafficking, maritime piracy and organized syndicate operations. The expansive U.S. coastline is difficult to police effectively, as are the U.S. waters in the region, and response capabilities – for search and rescue, oil spill recovery, and natural disasters, are limited. The U.S. must invest more in its Arctic capabilities in order to be in a position to respond to the aforementioned security threats.

28. Currently, U.S. Naval operations in the Arctic Ocean are mainly limited to undersea operations. The U.S. surface fleet is largely unaccustomed to operating in extreme cold or navigating ice hazards. The presence of either floating ice or pack ice potentially affects all aspects of surface ship operations, endangering bow mounted sonar domes and interfering with towed arrays. Propellers, rudders, fin stabilizers, and sea chests can also be adversely affected by operations in ice-infested waters. Additionally, the extreme cold, high atmospheric moisture and icy conditions can weaken steel hulls, change hydraulic system temperatures and crack or shred protective coatings and insulators.

29. If U.S. Naval and Coast Guard forces expect to operate safely and effectively in the Arctic Ocean in the coming decades, polar naval architecture will have to be addressed now, since vessels are acquired on multi-decade procurement cycles. The U.S. should commit to constructing ice-strengthened patrol ships for its sea services, similar to the Arctic Offshore Patrol ships (AOPS) being commissioned by the Royal Canadian Navy. Additionally, the United States must increase its icebreaker fleet.

30. Enhanced ice breaking capabilities are vital in order to properly support U.S. security interests in the Arctic. Freedom of navigation operations depend on safe access to “contested waters” and areas with excessive maritime claims. Similarly, for U.S. surface forces to maintain a persistent presence in the Arctic region, a condition precedent to effectively exercising law enforcement jurisdiction and improving domain awareness, they need to be able to safely navigate the region. Currently, the U.S. has two icebreakers. The Russian Federation has thirty-seven. A fleet of at least six heavy icebreakers would provide a full-time U.S. presence within the Arctic in both the east and west, while also allowing enough hulls for training, work-ups and post-deployment maintenance. This is the single most important strategic capability for the U.S. to pursue.
in the Arctic; a robust ice-breaking capability allows the U.S. to respond to all threats and all hazards in the region.

31. **POTENTIAL HOTSPOT OF GEOPOLITICAL TENSION: THE NORTHERN SEA ROUTE.**

32. Russia poses the greatest risk for geopolitical tension in the Arctic region. First, Russia appears to impair the right of navigational freedom in areas of the Arctic Ocean along the Northern Sea Route. Second, Russian reconnaissance and surveillance aircraft and fighter jet interception aircraft occasionally operate in a threatening or unsafe manner.

33. The strategically important Northern Sea Route is already subjected to a controversial domestic regulatory regime, governed by the Russian Federation’s Northern Sea Route Administration. Through national legislation, Russia has declared its territorial sea and exclusive economic zone in the Arctic as part of “the water area” of the Northern Sea Route.

34. This legislation is significant from the perspective of freedom of navigation, because Russia’s Northern Sea Route Administration regulations require all foreign flag vessels to request permission to enter “the water area” of the Northern Sea Route and transit only on routes prescribed by the Northern Sea Route Administration. These regulations are in direct conflict with core navigational freedoms, such as innocent passage and transit passage, established under international law. On the other hand, Article 234 of the United Nations Convention on the Law of the Sea affords Arctic coastal states special rights to prescribe and enforce vessel-source pollution standards in “ice-covered” areas of their exclusive economic zone. Arctic States should work through the Arctic Council to precisely define coastal state authority under Article 234 to avoid confusion, ambiguity and potentially an increase in tensions. The United Kingdom is encouraged to leverage its position as an Observer to the Arctic Council to oppose national legislation that adversely impacts core navigational freedoms.

35. Additionally, Russian surveillance and reconnaissance flights conduct threatening or intrusive exercises, which include circumnavigating the coastlines of other Arctic states, conducting “dark flights” that endanger civil aviation, and conducting aggressive interception of military aircraft from other countries in a manner that imperils safety.

36. In recent years, Russia has steadily been increasing its military footprint in the Arctic region, particularly along land areas adjacent to the Northern Sea Route. In December 2014, Russia activated a Joint Strategic Command for the Arctic, headquartered at Arkhangelsk. The naval forces of the Command are comprised primarily of the Northern Fleet, which was completely absorbed into the Command, and the land component is comprised of two brigades, with plans for a third as well as specially trained Arctic coastal defense divisions. Fourteen airfields and sixteen deepwater ports are in various stages of development along the Northern Sea Route. These capabilities and this infrastructure positions Russia to have a dominant military presence in the Arctic for the
foreseeable future. Whether Russia’s increased military footprint in the Arctic is purely defensive in nature remains to be seen.

37. ROLE OF NATO IN THE ARCTIC.

38. The Russian Federation has a clear focus on developing greater military capabilities in the Arctic, particularly naval capabilities. Russia’s newest submarine, SSGN *Severodvinsk*, is quieter than the Los Angeles-class U.S. submarine, and is stationed less than 40 miles from Norway on the Barents Sea. A total of eight Yasen class submarines, such as *Severodvinsk*, will be built by 2020.

39. While NATO should remain optimistic that security issues in the region will continue to be solved in a spirit of cooperation and partnership, the Alliance should also be positioned to support littoral Arctic member states, if necessary. Furthermore, NATO has an interest in regional stability, including the independence of Finland and Sweden. In particular, the Baltic Sea is a neighboring regional sea that has experienced greater Russian naval activity. Russian submarine operations, for example, have violated the territorial sea of neighboring states, in particular Finland.

40. The North Sea has also experienced greater Russian naval activity, with increased Russian submarine operations off the coast of Scotland. Russian submarine patrols across the North Atlantic rose by nearly 50% last year. Increased Russian patrols in the region may require increased spending by the Alliance on the ships and aircraft required to effectively track Russian submarines.

41. To best support littoral Arctic member states, NATO must also have a greater presence in the Arctic region. Part of this presence is optimizing existing infrastructure and plans. For example, NATO should better leverage Norway’s biennial winter defense exercise COLD RESPONSE, by increasing participating forces and supplementing ground and naval scenarios with those involving “hybrid” or “gray zone” attacks and cyber threats. Similarly, NATO, and more specifically NATO member states, should optimize their support of NATO’s Centre of Excellence for Cold Weather Operations (COE-CWO) to ensure their forces are trained to effectively respond to security threats in the Arctic, and their leaders instructed on the strategic, geopolitical and legal challenges in the region.

42. NATO anti-submarine warfare proficiency has atrophied and should be rebuilt. NATO member states should design a tranche of their next generation of surface warships to be able to operate effectively in the Arctic. The challenges facing the U.S. surface fleet described above are not unique to the United States. As these capabilities come on line, these next generation naval forces should participate in Alliance training exercises with an anti-submarine warfare (ASW) component, ala DYNAMIC MANTA, JOINT WARRIOR and NOBLE MARINER.

43. NATO must, however, be judicious in how it expands its presence in the Arctic. The Russian Federation – whether justified or not – is already suspicious of NATO expansion. Increased NATO presence in the Arctic must not be viewed as aggressive or destabilizing the region’s security balance. As evidenced by the 2011 Arctic Search and Rescue
Agreement, the development of the Polar Code, and the daily maritime border cooperation and routine security management between the U.S. Coast Guard and the Federal Border Service of Russia in the Bering Strait, the Russian Federation has shown an ability and willingness to cooperate on Arctic safety and security issues. If the Russian Navy can be incorporated into the Arctic Ocean as a net security provider, then an entirely new and powerful capacity is brought on line to contribute to maritime constabulary operations, humanitarian assistance and disaster relief. Such close coordination for maritime security cooperation also presents navies around the world with the opportunity to share best practices, present our perspective on how to best strengthen conflict avoidance at sea, and broaden maritime regional stability.

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